



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-1078; Project Identifier MCAI-2020-01574-R]

RIN 2120-AA64

Airworthiness Directives; Bell Textron Canada Limited Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Bell Textron Canada Limited Model 429 helicopters. This proposed AD was prompted by in-service reports of the loss of display and subsequent recovery of certain display units (DUs). This proposed AD would require revising the existing rotorcraft flight manual supplement (RFMS) for your helicopter and disabling the traffic alert and collision avoidance system (TCAS) POP-UP feature for certain DUs. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Bell Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J 1R4, Canada; telephone 1-450-

437-2862 or 1-800-363-8023; fax 1-450-433-0272; email productsupport@bellflight.com; or at <https://www.bellflight.com/support/contact-support>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1078; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the Transport Canada AD, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Darren Gassetto, Aerospace Engineer, COS Program Management Section, FAA, Operational Safety Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7323; email Darren.Gassetto@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2021-1078; Project Identifier MCAI-2020-01574-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Darren Gassetto, Aerospace Engineer, COS Program Management Section, FAA, Operational Safety Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7323; email Darren.Gassetto@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

Transport Canada, which is the aviation authority for Canada, has issued Transport Canada AD CF-2020-18R1, dated November 27, 2020 (Transport Canada AD CF-2020-18R1), to correct an unsafe condition for Bell Textron Canada Limited Model 429 helicopters, serial numbers 57001 through 57369, 57371, and 57373.

Transport Canada advises that it has received in-service reports of the loss of display and subsequent recovery of the DU manufactured by Rogerson Kratos (RK). During an instrument flight rules approach, a Bell Textron Canada Limited Model 429 helicopter lost its center DU display, which then rebooted, and subsequently lost its right-hand side (RHS) DU display, which then also rebooted. Investigation revealed that the DUs' power cycle occurred while in Map-Mode, which was caused by the RK DUs' limited processing capability for excessive null waypoints generated by the Garmin GTN 750/650 GPS/NAV/COMM/MFD.

Transport Canada also advises that the use of Map-Mode to the center DU should be limited only for Bell Textron Canada Limited Model 429 helicopters equipped with RK DUs and Garmin GTN 750/650 main software version 6.21 or later and that the use

of Map-Mode should be prohibited on both the RHS DU and left-hand side DU, if installed. In addition, Transport Canada advises that a new emergency and malfunction procedure in the event of center DU failure should be implemented.

If not addressed, a DU power cycle occurring during flight and consequent momentary loss of display information on the primary flight display and other DUs could result in the unexpected loss of display of important flight parameters to the pilots, including attitude, approach, airspeed, altitude, flight director information, navigation system cues, as well as engine and rotor drive system indications.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Bell Alert Service Bulletin 429-20-51, Revision B, dated July 17, 2021, which specifies procedures for disabling the TCAS POP-UP feature for certain DUs. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with Canada, Transport Canada, its technical representative, has notified the FAA of the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that the unsafe condition described previously is likely to exist or develop on other helicopters of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require revising the existing RFMS for your helicopter and disabling the TCAS POP-UP feature for certain DUs.

Differences between this Proposed AD and the Transport Canada AD

Transport Canada AD CF-2020-18R1 requires operators to “advise all flight crews” of the changes introduced by the RFMS revision. However, this proposed AD would not specifically require that action. 14 CFR 91.9 requires that no person may operate a civil aircraft without complying with the operating limitations specified in the RFMS. Therefore, including a requirement in this AD to operate the helicopter according to the revised RFMS would be redundant and unnecessary. Further, compliance with such a requirement in an AD would be impracticable to demonstrate or track on an ongoing basis; therefore, a requirement to operate the helicopter in such a manner would be unenforceable. The flight manual supplement changes proposed in this AD would also apply to the emergency and malfunction procedures section of the existing RFMS for your helicopter. FAA regulations mandate compliance only with the operating limitations section of the flight manual. Nonetheless, the FAA recommends that flight crews of the helicopters listed in the applicability operate in accordance with the revised emergency and malfunction procedures specified in this proposed AD.

This proposed AD would also propose to require disabling the TCAS POP-UP feature for certain DUs, which is not required in Transport Canada AD CF-2020-18R1. The FAA has coordinated this requirement with Transport Canada, and Transport Canada stated that it is planning to include this action in a future rulemaking action.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 88 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this proposed AD.

Revising the RFMS for your helicopter takes about 1 work-hour for an estimated cost of \$85 per helicopter and \$7,480 for the U.S. fleet.

Disabling the TCAS POP-UP feature for your helicopter takes about 0.5 work-hours for an estimated cost of \$43 per helicopter and \$3,784 for the U.S. fleet.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

Bell Textron Canada Limited: Docket No. FAA-2021-1078; Project Identifier MCAI-2020-01574-R.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bell Textron Canada Limited Model 429 helicopters, certificated in any category, serial numbers 57001 through 57369 inclusive, 57371, and 57373.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 3100, Indicating/Recording System.

(e) Unsafe Condition

This AD was prompted by in-service reports of the loss of display and subsequent recovery of certain display units (DUs). The FAA is issuing this AD to address a DU power cycle occurring during flight and consequent momentary loss of display information on the primary flight display and other DUs, which if not addressed, could result in the unexpected loss of display of important flight parameters to the pilots, including attitude, approach, airspeed, altitude, flight director information, navigation system cues, as well as engine and rotor drive system indications.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Revising the Rotorcraft Flight Manual Supplement (RFMS)

Within 30 days after the effective date of this AD: Revise the Types of Operation - Limitations (section 1-3-A.) of the existing RFMS for your helicopter to include the information in the “Limitations” procedure specified in figure 1 to paragraph (g) of this AD, revise the Configuration (section 1-5.) of the existing RFMS for your helicopter to

include the information in the “Configuration” specified in figure 2 to paragraph (g) of this AD, and revise the Emergency and Malfunction Procedures (section 3) of the existing RFMS for your helicopter to include the information in the “CENTER DU FAILURE” specified in figure 3 to paragraph (g) of this AD.

Figure 1 to paragraph (g) – Limitations procedure revision

1-3-A. LIMITATIONS

Safe Taxi® and Chart View, if installed, shall not be used as primary means for flight crews to orient themselves on the airport surface.

Use of the GTN for primary navigation for latitudes above 89.00°N and below 89.00°S is not authorized.

Use of MAP mode on the Pilot and Co-pilot (if installed) Rogerson Kratos (RK) DU is prohibited. Use of MAP mode may cause a power cycle of the DU.

MAP mode on the center RK DU shall not be selected during a DME Arc approach, as this may cause a power cycle of the DU.

MAP mode on the center RK DU shall not be selected during search pattern operations. Excessive search pattern legs in DU MAP mode may cause a power cycle of the DU.

The SD card or Flight Stream 510 (MMC) shall be present in each unit at all times.

Demo mode shall not be used in flight.

Figure 2 to paragraph (g) – Configuration revision

1-5. CONFIGURATION

Garmin GTN 750/650 main software shall be Version 4.00 with GPS software 5.00 or main software 6.21 with GPS software 5.2, or main software 6.62 with GPS software 5.2.

Flight Stream 510, if installed, shall be version 2.32 or later.

Both GTN units shall have the same software versions.

TCAS POP-UP mode shall be DISABLED on the Rogerson Kratos (RK) DU.

Figure 3 to paragraph (g) – Emergency and Malfunction Procedures revision

3-14-B. CENTER DU FAILURE

- **INDICATIONS:**

DU screen momentarily goes blank.

Pilot and Co-pilot (if installed) DU goes into composite mode.

- **PROCEDURE:**

NOTE

MAP mode on center DU is defaulted ON with Weather Radar (if installed).

Center DU — Deselect MAP mode.

Pilot/Copilot DU — Select flight mode, as desired.

Note 1 to paragraph (g): The information in the “CENTER DU FAILURE” specified in figure 3 to paragraph (g) of this AD can be found in Bell 429 Rotorcraft Flight Manual Supplement BHT-429-FMS-19, Revisions 3, 4, 5, and 6.

(h) Disabling the Traffic Alert and Collision Avoidance System (TCAS) POP-UP Feature

Within 30 days after the effective date of this AD: Disable the TCAS POP-UP mode, including those helicopters equipped with the TCAS kit, in the parameter setup page on all RK DUs, in accordance with paragraph 3. of the Accomplishment Instructions of Bell Alert Service Bulletin 429-20-51, Revision B, dated July 17, 2021.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, COS Program Management Section, FAA, Operational Safety Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7323; email Darren.Gassetto@faa.gov.

(2) For service information identified in this AD, contact Bell Textron Canada Limited, 12,800 Rue de l’Avenir, Mirabel, Quebec J7J 1R4, Canada; telephone 1-450-

437-2862 or 1-800-363-8023; fax 1-450-433-0272; email productsupport@bellflight.com; or at <https://www.bellflight.com/support/contact-support>. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(3) The subject of this AD is addressed in Transport Canada AD CF-2020-18R1, dated November 27, 2020. You may view the Transport Canada AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2021-1078.

Issued on December 16, 2021.

Ross Landes, Deputy Director for Regulatory Operations,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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